UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,967	08/27/2003	William Delaney	03-1067	6220

7590 01/04/2006

Pete Scott, Senior Corportate Counsel
Intellectual Property Law Department
1551 McCarthy Boulevard
Mail Stop D-106
Milpitas, CA 95035

EXAMINER	
NGUYEN, HIEP T	

ART UNIT	PAPER NUMBER
2187	

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/648,967	DELANEY ET AL.	
	Examiner	Art Unit	
	Hiep T. Nguyen	2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is a response to the amendment filed October 27, 2005. Claims 1-20 are pending in the application.
2. The indicated allowability of claims 10-20 is withdrawn in view of the newly discovered reference(s) to Wells et al., U.S. Patent Number 5,754,817. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

   A person shall be entitled to a patent unless –

   (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 8-11, and 17-19 are rejected under 35 U.S.C. 102(b) as anticipated by Wells et al., U.S. patent No. 5,754,817 [hereafter, Wells].
   a. As per claim 1: Well teaches a method for managing control structure access, said method comprising:
      i. configuring a memory window manager (60) to communicate with a processor (21) and a plurality of control structures (51a-51n), wherein data is communicable between said processor and said plurality of control structures [col. 6, lines 35-39], and
      ii. specifying which control structure among said plurality of control structures is accessible by said processor utilizing said memory window manager [col. 6, lines 61-66].
   b. As per claim 2: Wells further teaches that his memory window manager specifies which control structure among said plurality of control structures is mapped into an address space of the processor [see again col. 6, lines 61-66; and figure 5].

c. As per claim 8: Wells further teaches that his processor is a Central Processing Unit (CPU) of a computer system [see figure 4].

d. As per claim 9: Wells implicitly teaches that his memory window manger comprising an address computation engine since address translation is performed therein [see col. 7, lines 17-32].

e. As per claim 10-11 and 17-19: the claimed system basically encompasses the necessary elements for carrying out the claimed steps in claims 1-2 and 8-9. Accordingly, Wells also anticipates claims 10-11 and 17-19.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> a. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3-7, 12-16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wells as applied to claims 1 and 10 above, and further in view of well known features of which Official Notice is hereby taken.

a. Wells teaches a system and a method thereof for managing control structure access, as mentioned in the rejection of claim 1 and 10. Wells further teaches that his memory window manager comprises:

i. at least an element that allows the processor to specify a size for each control structure (i.e., flash memory card offset value) among the plurality of control structures [col. 7, lines 37-38];

ii. a window that permit the processor to access a control structure among the plurality of control structures [see col. 7, lines 35-37; figure 5; window 50n].

b. Wells, however, does not disclose that his memory window manger comprising:
   i. an element which permit the processor to program a base address in the memory for control structure storage, an/or
   ii. an element that permit the processor to specify an index number associated with a control structure among the plurality of control structures that is desired to be accessed by the processor.

c. It has been known and commonly practiced in the pertinent art to use the base address of a memory device and an offset value to locate a memory location within the memory device. It has also been known and commonly practiced in the pertinent art to use index number to associate a memory block among a plurality of memory blocks.

d. One having ordinary skill in the art, who is familiar with the above-mentioned well-known memory address parameters, looks that the teaching of Wells, would readily recognize that in order for a memory block 51(i) [i.e., claimed control structure] to be correctly mapped by the Wells mapping mechanism 60 [i.e., claimed memory window manager], the mapping mechanism needs to have elements for specifying the base address of the Wells memory 51 and the index value of the block to be accessed by the processor.

e. Accordingly, it would have been obvious [if not already inherent in the Wells system] to one having ordinary skill in the art to employ elements such as registers within the Wells mapping mechanism (60) for storing the base address of the memory 51 and index number of the memory block that the processor would like to access at a given time. It would have been obvious because such index value and base address are no more than the commonly uses and/or necessary parameters in mapping and/or locating a memory block among a plurality of memory block having the same block size such as that of the Wells memory blocks 51(i).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Smith, 6,792,515, teaches a system that uses memory window mapping mechanism for mapping a memory window to a common memory space of the coupling processors.

b. Gulick et al., 6,314,501, teaches a windowing function that maps the physical address space of the processors in each partition to the respective exclusive memory windows assigned to those partitions.

c. Cobb, 5,860,157, teaches a memory window of an interface controller may directly map a portion of the memory address space of the memory array into the system address space.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hiep T. Nguyen whose telephone number is (571) 272-4197. The examiner can normally be reached on Monday-Friday from 9:30 am to 6:00 pm.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hiep T Nguyen
Primary Examiner
Art Unit 2187

HTN